ABSTRACT

A switch and a process of operating a switch are described where a received data frame is copied one or more times into a memory before being transmitted out of the switch. The switch and method determine how much space in the memory is needed to store all of the copies of the received data frame and then the switch and method determine locations in the memory for storing the copies of the received data frames. The copies of the received data frame are stored until the ports designated as transmitting the copies of the received data frame are ready. When a port is ready, a copy of the received data frame is read out of the memory and the port is instructed where to locate the copy on a bus. When the port has retrieved the copy of the data frame, it transmits the data frame out of the switch.